#### **CLAIMS**

## 1. A diaphragm for a loudspeaker comprising:

a shape overlapping a first circle and a second circle in a top view of an outer periphery shape of the diaphragm,

wherein the first circle has a first center point and a first radius, and the second circle has a second center point different from the first center point and a second radius different from the first radius.

## 10 2. The diaphragm for the loudspeaker of claim 1,

wherein a through-hole for fixing a voice coil is formed at a center of the diaphragm, and

the diaphragm has an edge-fixing part for being fixed to a loudspeaker frame via an edge at its outer periphery.

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#### 3. A diaphragm comprising:

a through-hole for fixing a voice coil formed at a center of the diaphragm; and

an edge-fixing part at an outer periphery of the diaphragm,

wherein the outer periphery of the diaphragm is substantially circular, and

the outer periphery of the diaphragm has a shape that a first circle and a second circle are overlapped each other with their center points displaced in such a manner that at least one part of an outer periphery of the first circle and the second circle forms a part of the substantially circular outer periphery.

# 4. The diaphragm of claim 3,

wherein center points of the first circle and the second circle are displaced from a center point of an entire shape of the diaphragm.

### 5. A loudspeaker comprising:

- a magnetic circuit including a magnetic gap;
- a cylindrical voice coil whose end is inserted into the magnetic gap;
- a diaphragm fixed to an other end of the voice coil; and
- a frame holding an outer periphery of the diaphragm via an edge,

wherein a through-hole for fixing the voice coil is formed at a center of the diaphragm,

wherein the diaphragm has a shape overlapping a first circle and a second circle in a top view of an outer periphery shape of the diaphragm, and

wherein the first circle has a first center point and a first radius, and the second circle has a second center point different from the first center point and a second radius different from the first radius.

### 6. The loudspeaker of claim 5,

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wherein the diaphragm has a third circle, the third circle surrounds both the first circle and the second circle, and the third circle contacts with outer peripheries of the first circle and the second circle, and

a center point of the third circle is a center point of the diaphragm.

### 7. The loudspeaker of claim 5,

wherein the outer periphery of the diaphragm has a shape that the first circle and the second circle are overlapped each other with their center points displaced in such a manner that at least one part of an outer periphery of the first circle and the second circle forms a part of the substantially circular outer periphery.

# 8. The loudspeaker of claim 7,

wherein center points of the first circle and the second circle are displaced from a center point of an entire shape of the diaphragm.